

Speed Class Standards for Video Recording

SD Speed Class/UHS Speed Class/Video Speed Class

Greater Performance Choices

There are three kinds of Speed Classes, “Speed Class”, “UHS Speed Class” and “Video Speed Class.”

As a characteristic of flash memory, actual transfer speed varies. Variable speeds are difficult to reliably record streaming content such as video because it requires a constant writing speed. All Speed Classes provide the constant speed necessary for video recording by designating a minimum writing performance so that minimum and constant speed could be achieved for camcorders, video recorders and other devices with video recording capabilities under the conditional write operation specified in the standard.

	SD Standard	SDHC Standard	SDXC Standard	SDUC Standard
Capacity	up to 2GB	more than 2GB up to 32GB	more than 32GB up to 2TB	more than 2TB up to 128TB
File System	FAT 12, 16	FAT 32	exFAT	exFAT
SD Logo				
Form Factor Size	<u>SD</u> (https://www.sdcard.org/developers/sd-standard-overview/)			
	<u>microSD</u> (https://www.sdcard.org/developers/sd-standard-overview/)			
Speed Classes (https://www.sdcard.org/developers/sd-standard-overview/speed-class/)	Normal Speed mode	C2, C4, C6		
	High Speed mode	C2, C4, C6, C10, V6, V10		
	UHS-I mode	—	C2, C4, C6, C10 U1, U3 V6, V10, V30	
	UHS-II mode	—	C4, C6, C10 U1, U3 V6, V10, V30, V60, V90	
	UHS-III mode	—	C4, C6, C10 U1, U3 V6, V10, V30, V60, V90	

Video Speed Class in SD Memory Cards



SD Speed Class

Minimum Sequential Write Speed	Speed Class			
	Speed Class	UHS Speed Class	Video Speed Class	
Card Image				Corresponding Video Format The necessary speed varies by each recording/playback device condition. in the same format.
90MB/sec			V90	8K Video 4K Video HD/Full HD Video Standard Video
60MB/sec			V60	
30MB/sec		U3	V30	
10MB/sec	10	U1	V10	
6MB/sec	6		V6	
4MB/sec	4			
2MB/sec	2			

Video Format

